

## CLAIMS

We Claim:

- 1           1. A connection cable comprising:  
2           an optical cable; and,  
3           an integrated electrical connector permanently fixed to the optical cable,  
4           the integrated electrical connector being for plug-in connection to a matching  
5           electrical connector on a target device.
  
- 1           2. A connection cable as in claim 1 additionally comprising:  
2           a second integrated electrical connector permanently fixed to the optical  
3           cable, the second integrated electrical connector being for plug-in connection to  
4           a matching electrical connector on a second target device.
  
- 1           3. A connection cable as in claim 1 wherein the optical cable consists of a  
2           single optical fiber.
  
- 1           4. A connection cable as in claim 1 wherein the optical cable consists of  
2           multiple optical fibers.
  
- 1           5. A connection cable as in claim 1 wherein data transmission through the  
2           optical cable is at least one of the following:  
3           digital data transmission;  
4           analog data transmission.

1           6. A connection cable as in claim 1 wherein the matching electrical  
2 connector is compatible with at least on of the following protocols:

3           universal serial bus (USB) protocol;

4           USB 2;

5           IEEE 1394 (Firewire);

6           Firewire 800;

7           Ethernet;

8           Enterprise Systems Connection (ESCON);

9           Infiniband;

10          a proprietary system interconnection.

1           7. A connection cable as in claim 1 wherein data transmission through the  
2 optical cable is compatible with at least one of the following:

3           synchronous optical network (Sonet) protocol;

4           optical fibre channel protocol;

5           Ethernet protocol.

1           8. A method for constructing a connection cable comprising the  
2 following step:

3           permanently fixing an integrated electrical connector to an optical cable,

4           the integrated electrical connector being for plug-in connection to a matching

5           electrical connector on a target device.

1           9. A method as in claim 8 additionally comprising the following step:  
2           permanently fixing a second integrated electrical connector to the optical  
3 cable, the second integrated electrical connector being for plug-in connection to  
4 a matching electrical connector on a second target device.

1           10. A method as in claim 8 wherein the optical cable consists of a single  
2 optical fiber.

1           11. A method as in claim 8 wherein the optical cable consists of multiple  
2 optical fibers.

1           12. A method as in claim 8 wherein data transmission through the optical  
2 cable is at least one of the following:  
3           digital data transmission;  
4           analog data transmission.

1           13. A method as in claim 8 wherein the matching electrical connector is  
2 compatible with at least one of the following protocols:  
3           universal serial bus (USB) protocol;  
4           USB 2;  
5           IEEE 1394 (Firewire);  
6           Firewire 800;

7 Ethernet;  
8 Enterprise Systems Connection (ESCON);  
9 Infiniband;  
10 a proprietary system interconnection.

1 14. A method as in claim 8 wherein data transmission through the optical  
2 cable is compatible with at least one of the following:  
3 synchronous optical network (Sonet) protocol;  
4 optical fibre channel protocol;  
5 Ethernet protocol.

1 15. A method for connecting two target devices comprising the following  
2 steps:  
3 plugging a first integrated electrical connector permanently affixed to an  
4 optical cable into a matching electrical connector of a first target device; and,  
5 plugging a second integrated electrical connector permanently affixed to  
6 the optical cable into a matching electrical connector of a second target device.

1 16. A method as in claim 15 wherein the optical cable consists of a single  
2 optical fiber.

1 17. A method as in claim 15 wherein the optical cable consists of multiple  
2 optical fibers.

1           18. A method as in claim 15 wherein data transmission through the  
2 optical cable is at least one of the following:

3           digital data transmission;

4           analog data transmission.

1           19. A method as in claim 15 wherein the matching electrical connector is  
2 compatible with at least one of the following protocols:

3           universal serial bus (USB) protocol;

4           USB 2;

5           IEEE 1394 (Firewire);

6           Firewire 800;

7           Ethernet;

8           Enterprise Systems Connection (ESCON);

9           Infiniband;

10          a proprietary system interconnection.

1           20. A method as in claim 15 wherein data transmission through the  
2 optical cable is compatible with at least one of the following:

3           synchronous optical network (Sonet) protocol;

4           optical fibre channel protocol;

5           Ethernet protocol.